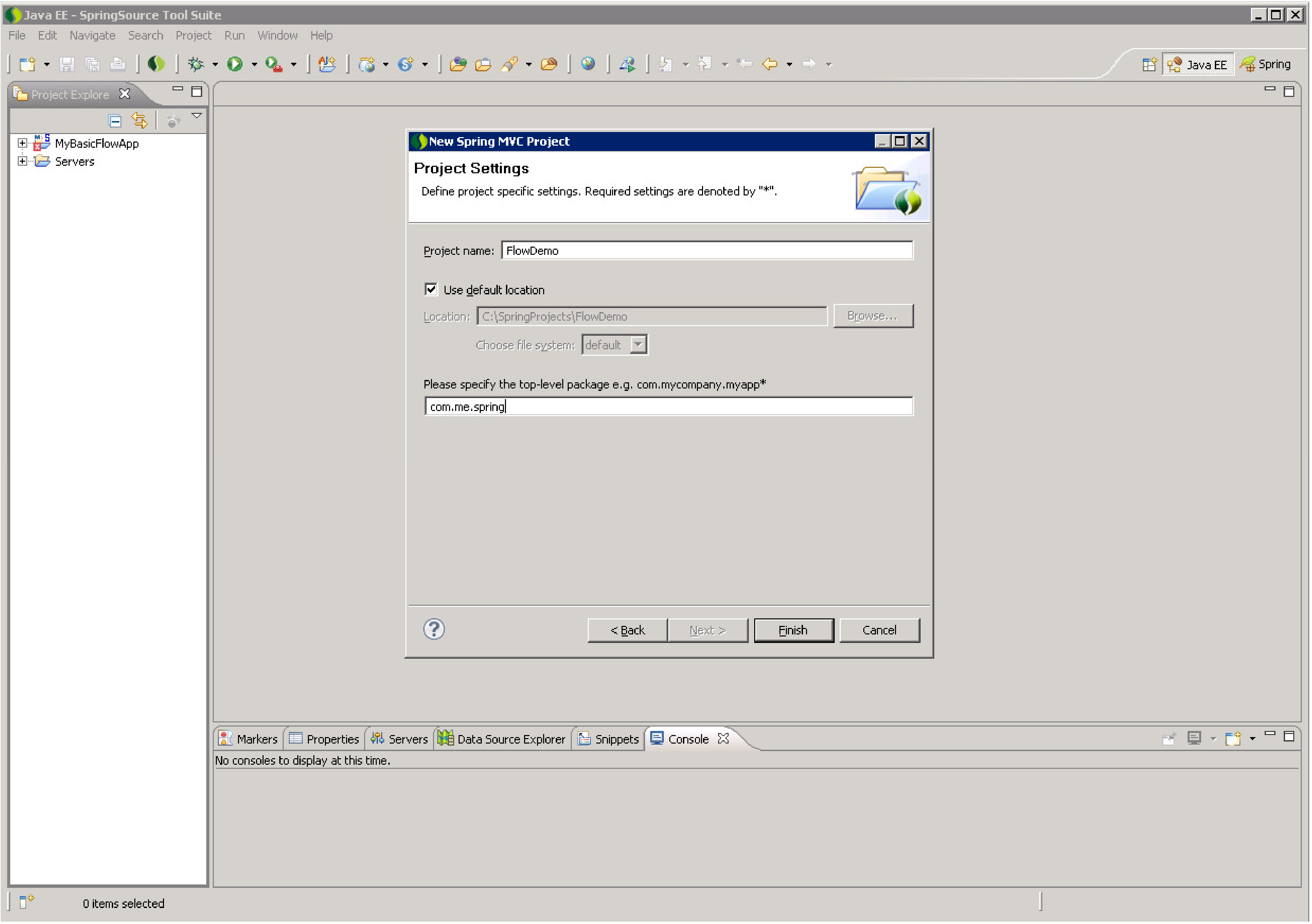
Step 1. Create a new Spring MVC Application.



Java EE - SpringSource Tool Suite
File Edit Navigate Search Project Run Window Help
Java EE
Spring
Project Explore
MyBasicFlowApp
Servers
New Spring MVC Project

Project Settings

Define project specific settings. Required settings are denoted by "*".

Project name: FlowDemo

☑ Use default location

Location: C:\SpringProjects\FlowDemo

Choose file system: default

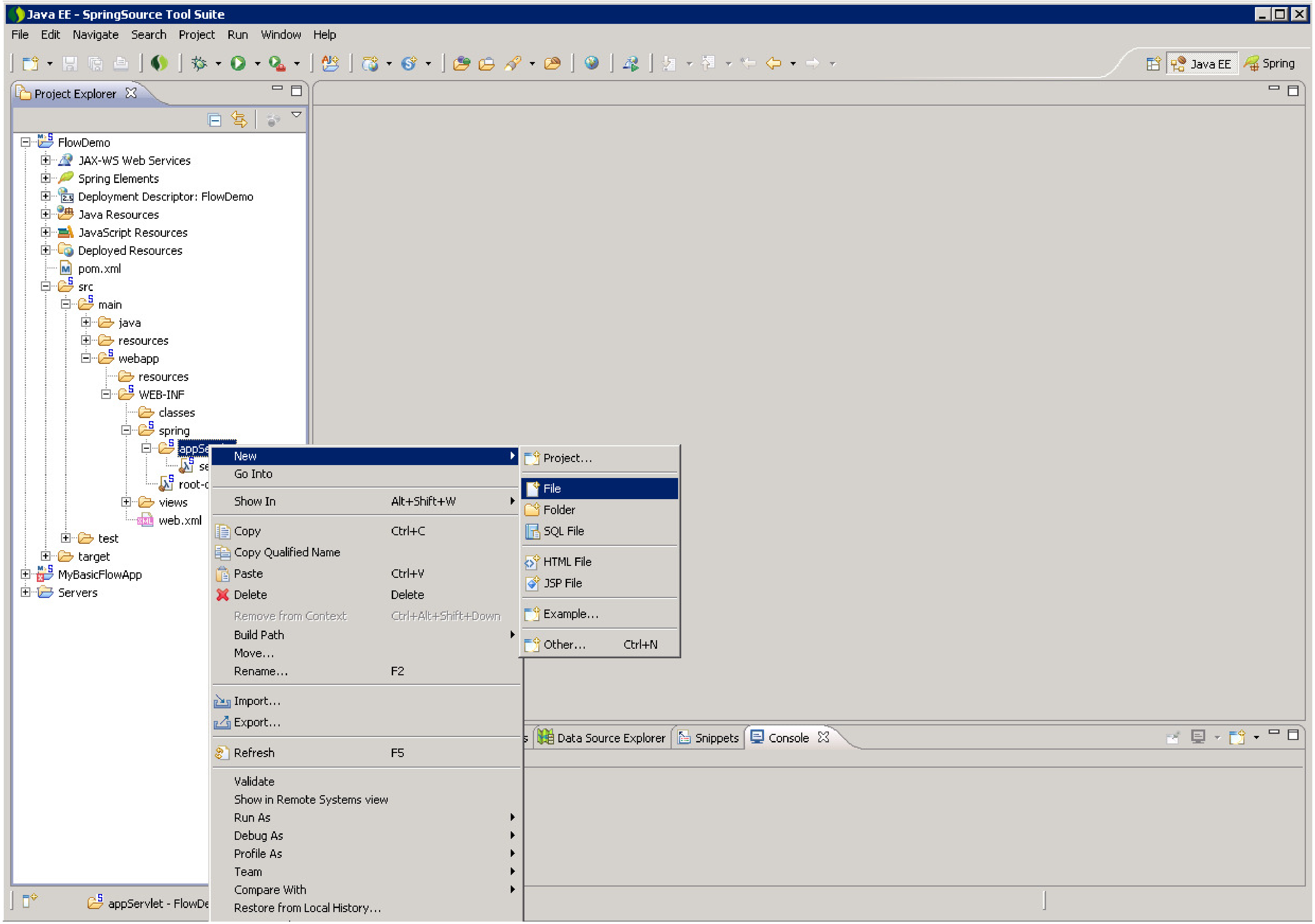
Please specify the top-level package e.g. com.mycompany.myapp*

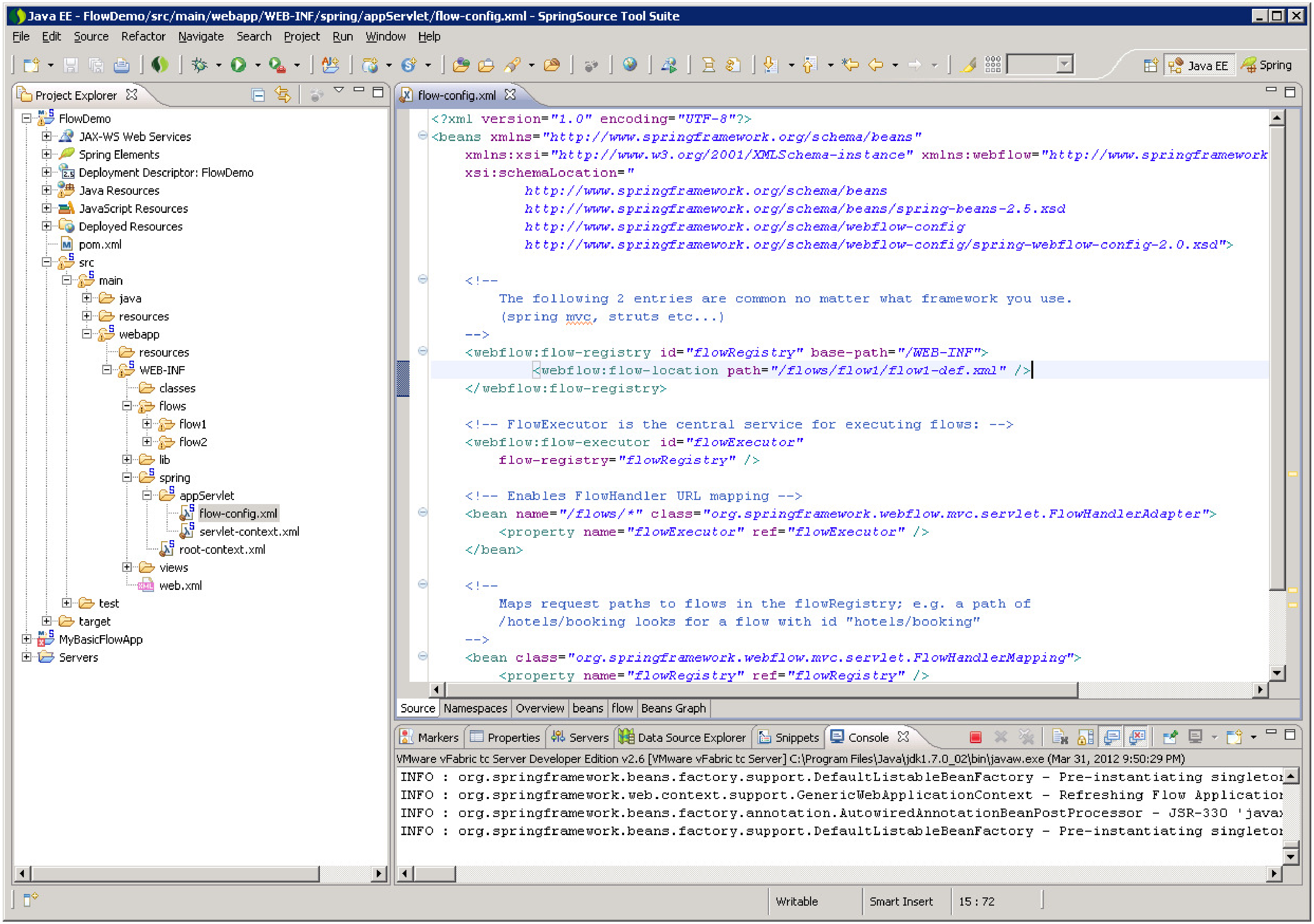
com.me.spring

No consoles to display at this time.

0 items selected

Step 2. Create the flow-config.xml file





```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:webflow="http://www.springframework
    xsi:schemaLocation="
           http://www.springframework.org/schema/beans
           http://www.springframework.org/schema/beans/spring-beans-2.5.xsd
           http://www.springframework.org/schema/webflow-config
           http://www.springframework.org/schema/webflow-config/spring-webflow-config-2.0.xsd">

    <!--
        The following 2 entries are common no matter what framework you use.
        (spring mvc, struts etc...)
    -->
    <webflow:flow-registry id="flowRegistry" base-path="/WEB-INF">
            <webflow:flow-location path="/flows/flow1/flow1-def.xml" />
    </webflow:flow-registry>

    <!-- FlowExecutor is the central service for executing flows: -->
    <webflow:flow-executor id="flowExecutor"
        flow-registry="flowRegistry" />

    <!-- Enables FlowHandler URL mapping -->
    <bean name="/flows/*" class="org.springframework.webflow.mvc.servlet.FlowHandlerAdapter">
        <property name="flowExecutor" ref="flowExecutor" />
    </bean>

    <!--
        Maps request paths to flows in the flowRegistry; e.g. a path of
        /hotels/booking looks for a flow with id "hotels/booking"
    -->
    <bean class="org.springframework.webflow.mvc.servlet.FlowHandlerMapping">
        <property name="flowRegistry" ref="flowRegistry" />
```

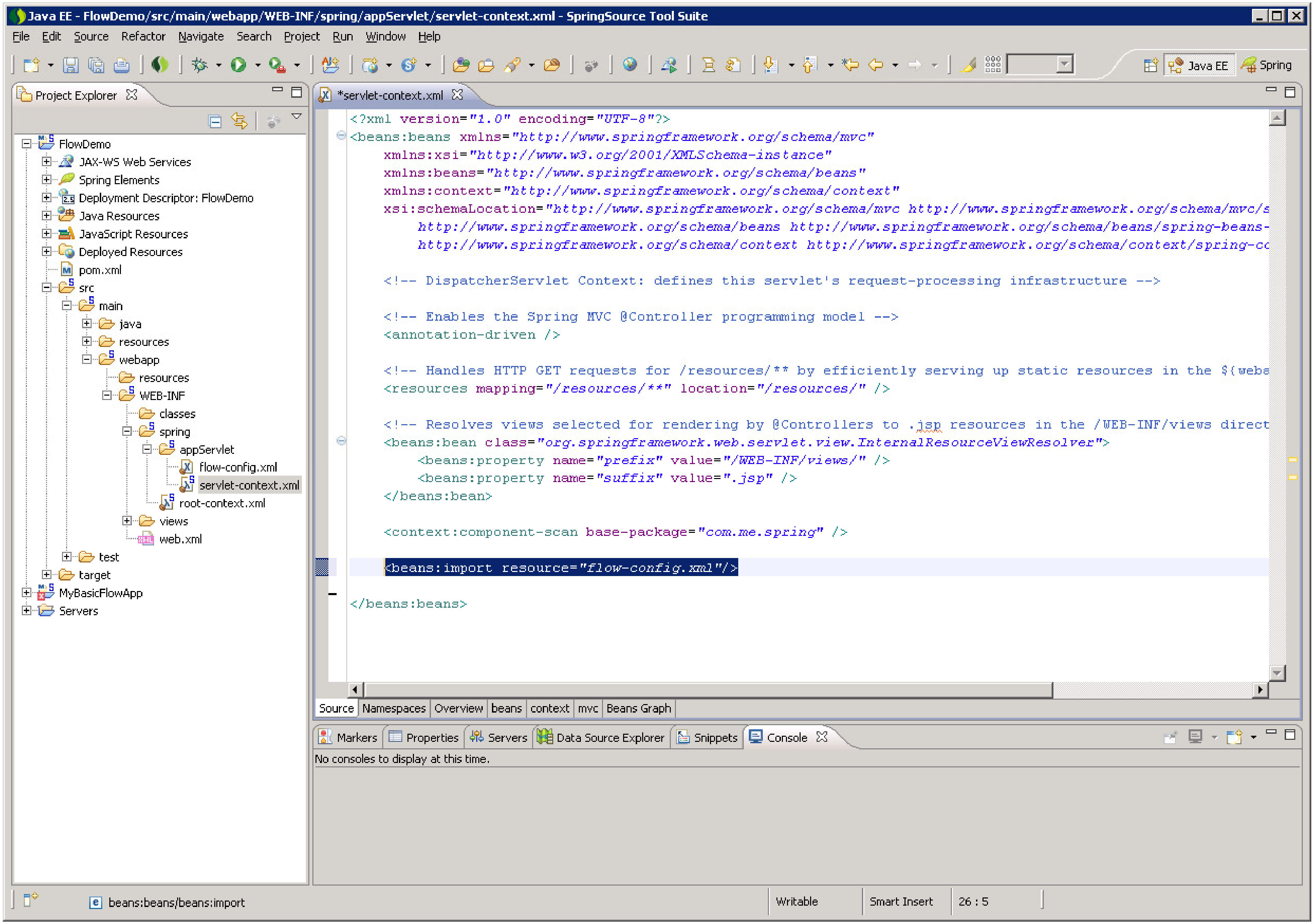
VMware vFabric tc Server Developer Edition v2.6 [VMware vFabric tc Server] C:\Program Files\Java\jdk1.7.0_02\bin\javaw.exe (Mar 31, 2012 9:50:29 PM)

```
INFO : org.springframework.beans.factory.support.DefaultListableBeanFactory - Pre-instantiating singleto
INFO : org.springframework.web.context.support.GenericWebApplicationContext - Refreshing Flow Applicatio
INFO : org.springframework.beans.factory.annotation.AutowiredAnnotationBeanPostProcessor - JSR-330 'javax
INFO : org.springframework.beans.factory.support.DefaultListableBeanFactory - Pre-instantiating singleto
```

Step 3. Here is the flow-config.xml file. Each flow needs to be added with `<webflow:flow-location ../>` **inside** `<webflow:flow-registry..>`

```xml
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:webflow="http://www.springframework.org/schema/webflow-config"
      xsi:schemaLocation="
           http://www.springframework.org/schema/beans
           http://www.springframework.org/schema/beans/spring-beans-2.5.xsd
           http://www.springframework.org/schema/webflow-config
           http://www.springframework.org/schema/webflow-config/spring-webflow-config-2.0.xsd">

      <!--
            The following 2 entries are common no matter what framework you use.
            (spring mvc, struts etc...)
      -->
      <webflow:flow-registry id="flowRegistry" base-path="/WEB-INF">
            <webflow:flow-location path="/flows/flow1/flow1-def.xml" />
      </webflow:flow-registry>

      <!-- FlowExecutor is the central service for executing flows: -->
      <webflow:flow-executor id="flowExecutor"
            flow-registry="flowRegistry" />

      <!-- Enables FlowHandler URL mapping -->
      <bean name="/flows/*" class="org.springframework.webflow.mvc.servlet.FlowHandlerAdapter">
            <property name="flowExecutor" ref="flowExecutor" />
      </bean>

      <!--
            Maps request paths to flows in the flowRegistry; e.g. a path of
            /hotels/booking looks for a flow with id "hotels/booking"
      -->
      <bean class="org.springframework.webflow.mvc.servlet.FlowHandlerMapping">
            <property name="flowRegistry" ref="flowRegistry" />
            <property name="order" value="1" />
      </bean>

      <bean class="org.springframework.webflow.mvc.servlet.FlowHandlerMapping">
            <property name="flowRegistry" ref="flowRegistry" />

            <property name="order" value="1" />
      </bean>

</beans>
```

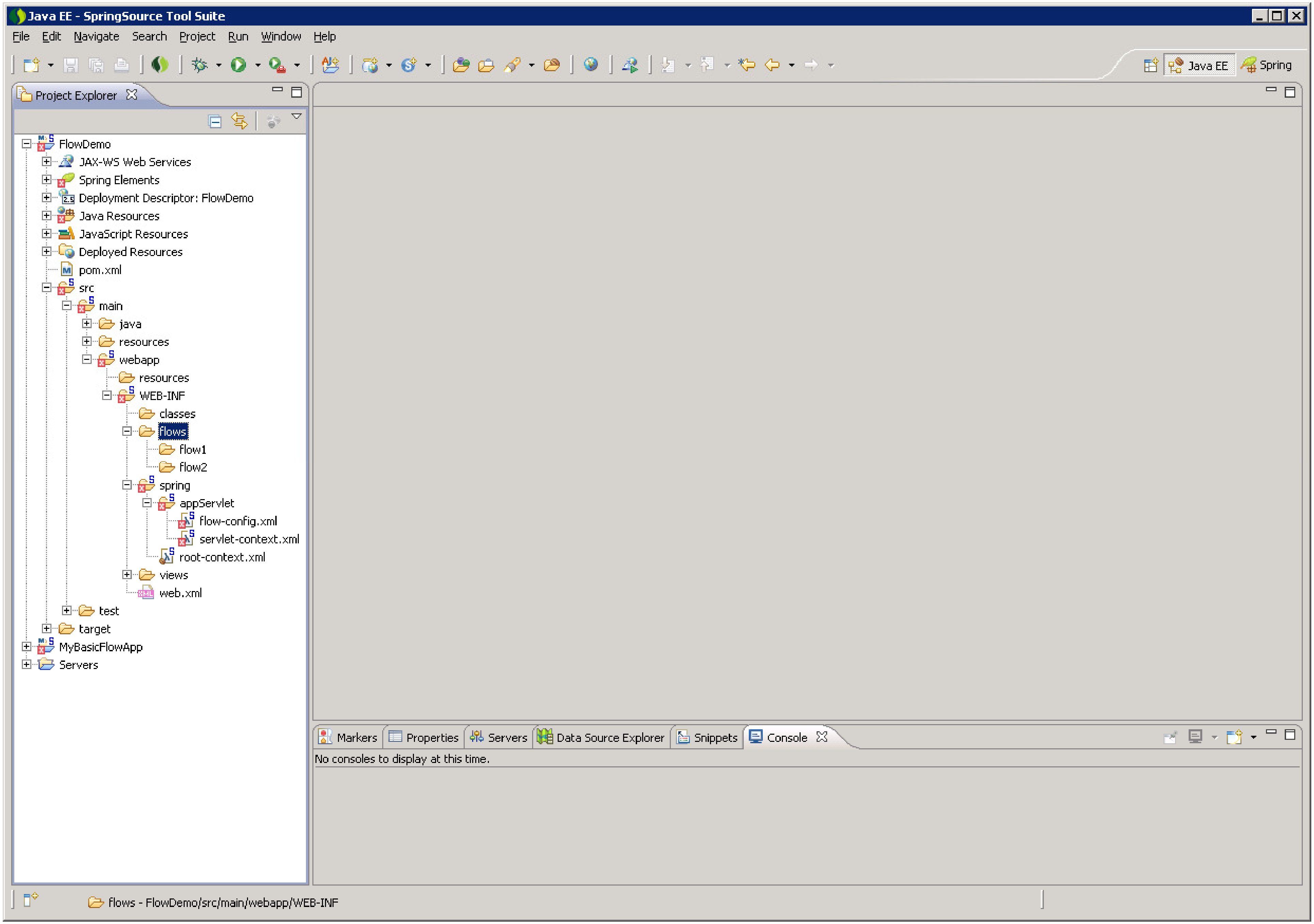
Step 4. Point to the flow-config.xml file from dispatcher's xml file.



```
<?xml version="1.0" encoding="UTF-8"?>
<beans:beans xmlns="http://www.springframework.org/schema/mvc"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:beans="http://www.springframework.org/schema/beans"
    xmlns:context="http://www.springframework.org/schema/context"
    xsi:schemaLocation="http://www.springframework.org/schema/mvc http://www.springframework.org/schema/mvc/s
        http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans-
        http://www.springframework.org/schema/context http://www.springframework.org/schema/context/spring-cc

    <!-- DispatcherServlet Context: defines this servlet's request-processing infrastructure -->

    <!-- Enables the Spring MVC @Controller programming model -->
    <annotation-driven />

    <!-- Handles HTTP GET requests for /resources/** by efficiently serving up static resources in the ${webs
    <resources mapping="/resources/**" location="/resources/" />

    <!-- Resolves views selected for rendering by @Controllers to .jsp resources in the /WEB-INF/views direct
    <beans:bean class="org.springframework.web.servlet.view.InternalResourceViewResolver">
        <beans:property name="prefix" value="/WEB-INF/views/" />
        <beans:property name="suffix" value=".jsp" />
    </beans:bean>

    <context:component-scan base-package="com.me.spring" />

    <beans:import resource="flow-config.xml"/>

</beans:beans>
```

No consoles to display at this time.

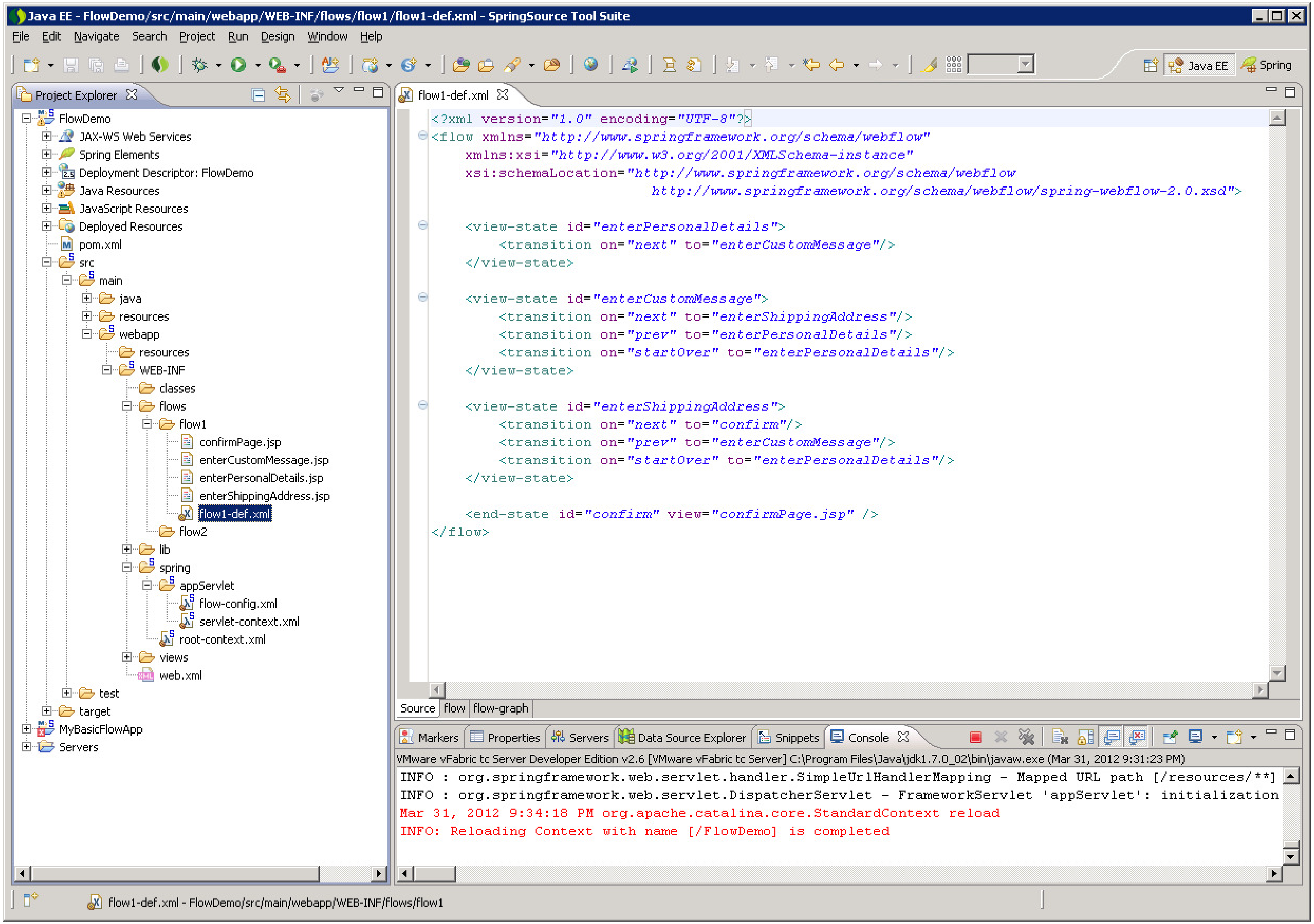
Step 5. Create a directory under WEB-INF to store flow files, JSPs and flow-definition file.



No consoles to display at this time.

flows - FlowDemo/src/main/webapp/WEB-INF

Step 6. Add flow definition file to flow1



```
<?xml version="1.0" encoding="UTF-8"?>
<flow xmlns="http://www.springframework.org/schema/webflow"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.springframework.org/schema/webflow
             http://www.springframework.org/schema/webflow/spring-webflow-2.0.xsd">

  <view-state id="enterPersonalDetails">
    <transition on="next" to="enterCustomMessage"/>
  </view-state>

  <view-state id="enterCustomMessage">
    <transition on="next" to="enterShippingAddress"/>
    <transition on="prev" to="enterPersonalDetails"/>
    <transition on="startOver" to="enterPersonalDetails"/>
  </view-state>

  <view-state id="enterShippingAddress">
    <transition on="next" to="confirm"/>
    <transition on="prev" to="enterCustomMessage"/>
    <transition on="startOver" to="enterPersonalDetails"/>
  </view-state>

  <end-state id="confirm" view="confirmPage.jsp" />
</flow>
```

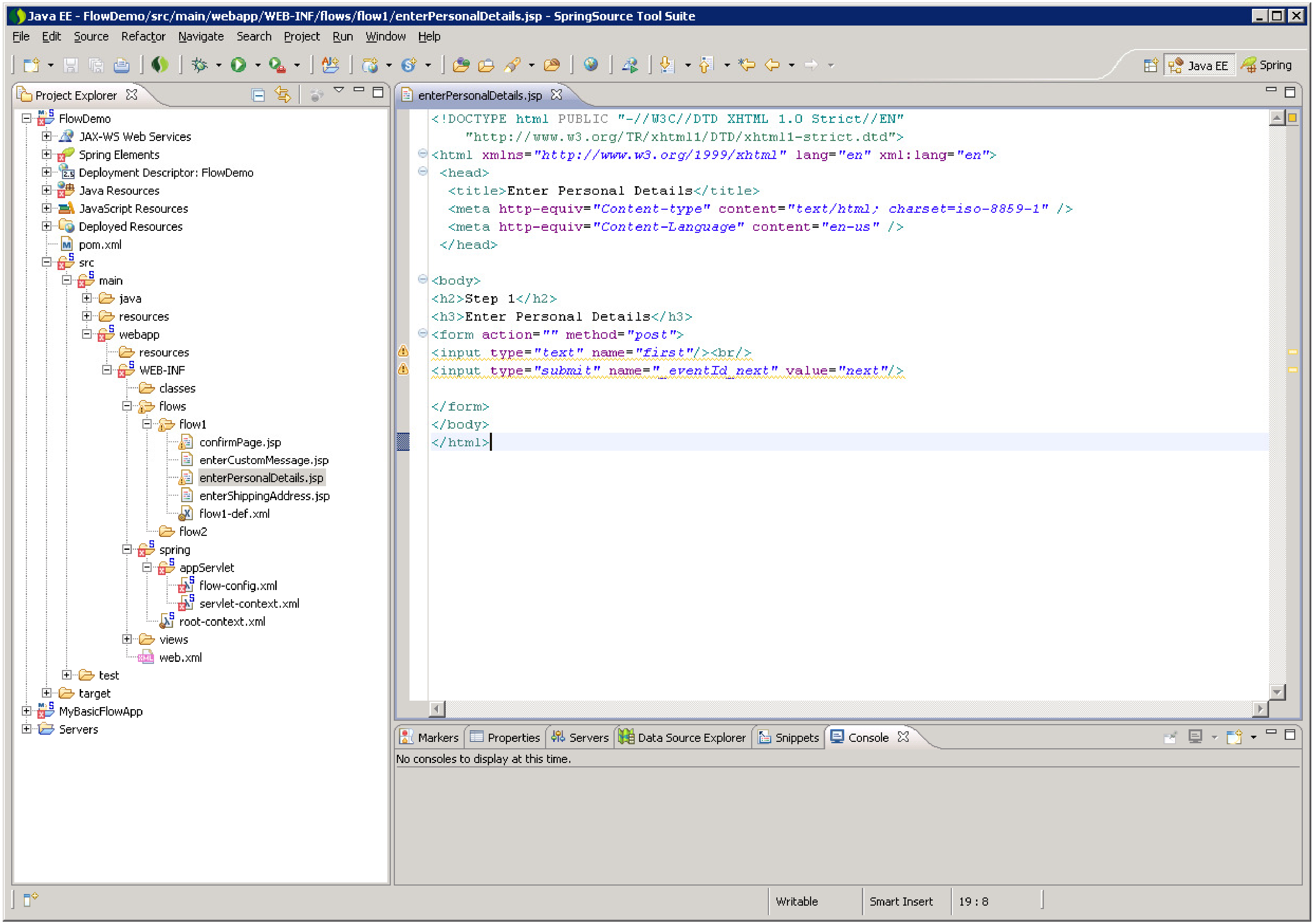
VMware vFabric tc Server Developer Edition v2.6 [VMware vFabric tc Server] C:\Program Files\Java\jdk1.7.0_02\bin\javaw.exe (Mar 31, 2012 9:31:23 PM)

```
INFO : org.springframework.web.servlet.handler.SimpleUrlHandlerMapping - Mapped URL path [/resources/**]
INFO : org.springframework.web.servlet.DispatcherServlet - FrameworkServlet 'appServlet': initialization
Mar 31, 2012 9:34:18 PM org.apache.catalina.core.StandardContext reload
INFO: Reloading Context with name [/FlowDemo] is completed
```

Step 7. Here is the flow1-def.xml contents you could COPY-PASTE.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<flow xmlns="http://www.springframework.org/schema/webflow"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="http://www.springframework.org/schema/webflow
                          http://www.springframework.org/schema/webflow/spring-webflow-2.0.xsd">

      <view-state id="enterPersonalDetails">
            <transition on="next" to="enterCustomMessage"/>
      </view-state>

      <view-state id="enterCustomMessage">
            <transition on="next" to="enterShippingAddress"/>
            <transition on="prev" to="enterPersonalDetails"/>
            <transition on="startOver" to="enterPersonalDetails"/>
      </view-state>

      <view-state id="enterShippingAddress">
            <transition on="next" to="confirm"/>
            <transition on="prev" to="enterCustomMessage"/>
            <transition on="startOver" to="enterPersonalDetails"/>
      </view-state>

      <end-state id="confirm" view="confirmPage.jsp" />
</flow>
```

Step 8. Create the JSP pages in the flow.



```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
 <head>
  <title>Enter Personal Details</title>
  <meta http-equiv="Content-type" content="text/html; charset=iso-8859-1" />
  <meta http-equiv="Content-Language" content="en-us" />
 </head>

<body>
<h2>Step 1</h2>
<h3>Enter Personal Details</h3>
<form action="" method="post">
<input type="text" name="first"/><br/>
<input type="submit" name="_eventId_next" value="next"/>

</form>
</body>
</html>
```

No consoles to display at this time.

Step 8.1 enterPersonalDetails.jsp

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
 <head>
  <title>Enter Personal Details</title>
  <meta http-equiv="Content-type" content="text/html; charset=iso-8859-1" />
  <meta http-equiv="Content-Language" content="en-us" />
 </head>

<body>
<h2>Step 1</h2>
<h3>Enter Personal Details</h3>
<form action="" method="post">
<input type="text" name="first"/><br/>
<input type="submit" name="_eventId_next" value="next"/>

</form>
</body>
</html>
```

Step 8.2 enterCustomMessage.jsp

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
 <head>
  <title>Enter Custom Message</title>
  <meta http-equiv="Content-type" content="text/html; charset=iso-8859-1" />
  <meta http-equiv="Content-Language" content="en-us" />
 </head>

<body>
<h3>Enter Custom Message</h3>
<form action="" method="post">
<input type="text"/><br/>
<input type="submit" name="_eventId_next" value="next"/><br/>
<input type="submit" name="_eventId_prev" value="prev"/> Try clicking this to go back<br/>
<input type="submit" name="_eventId_startOver" value="startOver"/><br/>

<p>Hint: Also try clicking the browser back button... Web flows don't allow you to suffer with those annoying messages
that ask you to "Repost"</p>

</form>
</body>
</html>
```

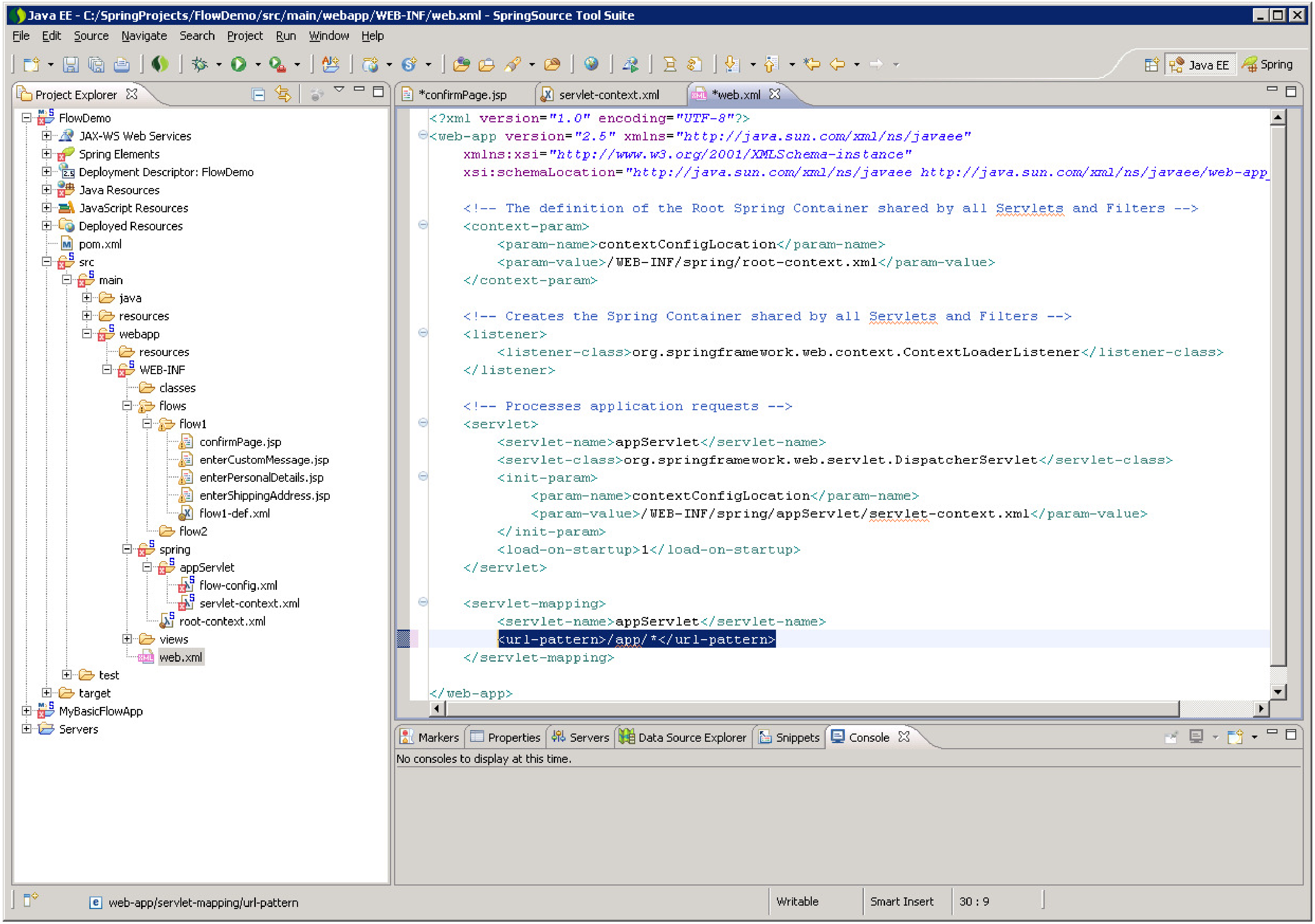
Step 8.3 enterShippingAddress.jsp

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
 <head>
  <title></title>
  <meta http-equiv="Content-type" content="text/html; charset=iso-8859-1" />
  <meta http-equiv="Content-Language" content="en-us" />
 </head>

<body>
<h2>Step 3</h2>
<h3>Enter Shipping Address</h3>
<form action="" method="post">
<input type="text"/><br/>
<input type="submit" name="_eventId_next" value="next"/>
<input type="submit" name="_eventId_prev" value="prev"/><br/>
<input type="submit" name="_eventId_startOver" value="startOver"/><br/>

</form>
</body>
</html>
```

Step 8.4 confirmPage.jsp

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>

<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
 <head>
  <title></title>
  <meta http-equiv="Content-type" content="text/html; charset=iso-8859-1" />
  <meta http-equiv="Content-Language" content="en-us" />
 </head>

<body>
<h3>Print Confirmation</h3>

<p>This is the last page of the Wizard.</p>
<a href="<c:url value='/app/flows/flow1'/>">Start new Wizard Flow</a>

<p>This is the end state of this flow. Notice when you click the above link or click the back button it will
it will start a new flow regardless.... </p>

<p>No matter what you do you can not mess up what was submitted in step 3.</p>
</body>
</html>
```

Step 9. Modify the web.xml file which is initially configured to handle all request by default if using Eclipse. Now /app/* is mapped to DispatcherServlet.



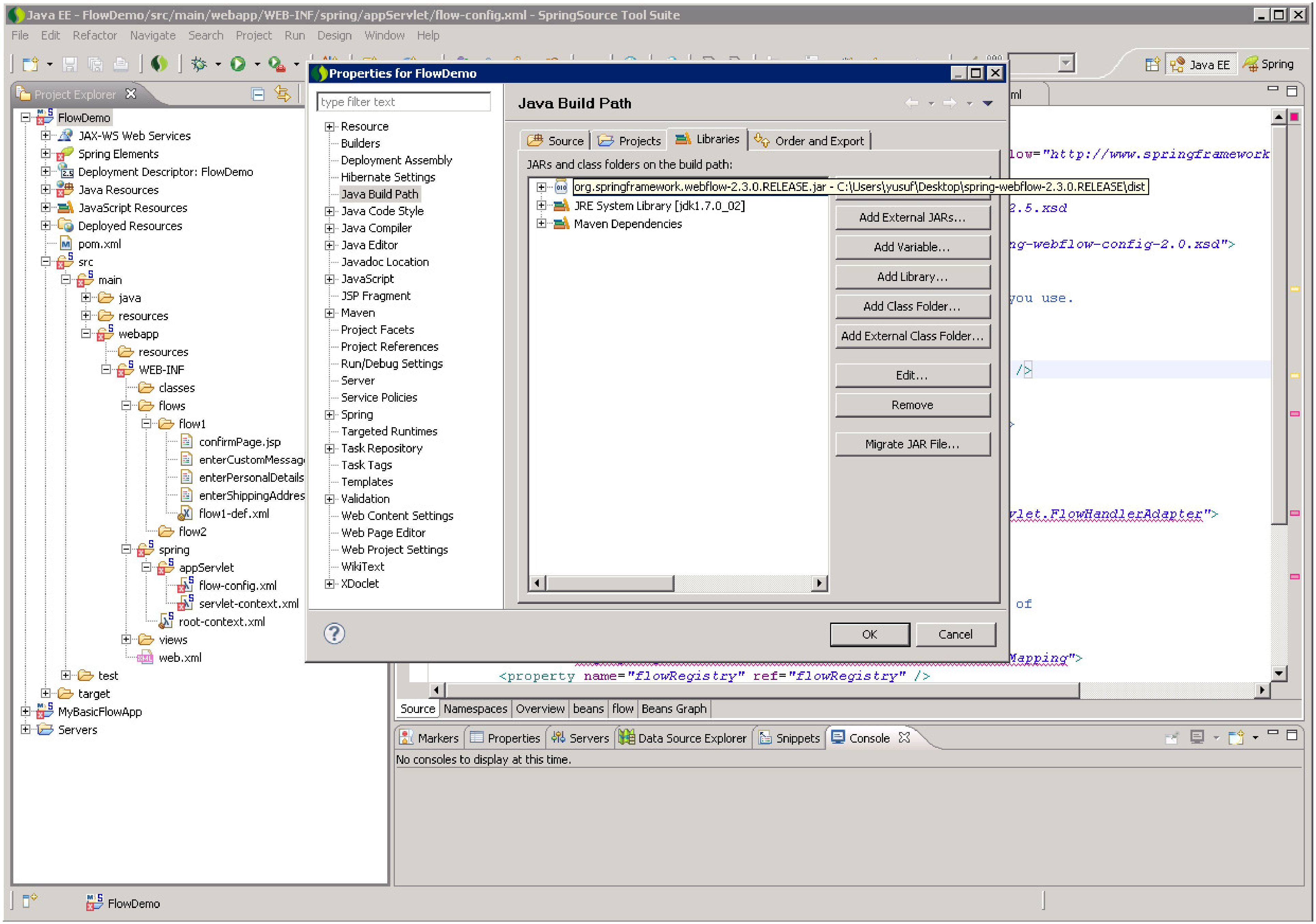
Java EE - C:/SpringProjects/FlowDemo/src/main/webapp/WEB-INF/web.xml - SpringSource Tool Suite

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="2.5" xmlns="http://java.sun.com/xml/ns/javaee"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app_

    <!-- The definition of the Root Spring Container shared by all Servlets and Filters -->
    <context-param>
        <param-name>contextConfigLocation</param-name>
        <param-value>/WEB-INF/spring/root-context.xml</param-value>
    </context-param>

    <!-- Creates the Spring Container shared by all Servlets and Filters -->
    <listener>
        <listener-class>org.springframework.web.context.ContextLoaderListener</listener-class>
    </listener>

    <!-- Processes application requests -->
    <servlet>
        <servlet-name>appServlet</servlet-name>
        <servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
        <init-param>
            <param-name>contextConfigLocation</param-name>
            <param-value>/WEB-INF/spring/appServlet/servlet-context.xml</param-value>
        </init-param>
        <load-on-startup>1</load-on-startup>
    </servlet>

    <servlet-mapping>
        <servlet-name>appServlet</servlet-name>
        <url-pattern>/app/*</url-pattern>
    </servlet-mapping>

</web-app>
```

No consoles to display at this time.

web-app/servlet-mapping/url-pattern | Writable | Smart Insert | 30 : 9

Step 10. Add web-flow jar file to the build path (Or use Maven to add dependenceies). (If using Netbeans, right click on libraries, and add the required jar file)



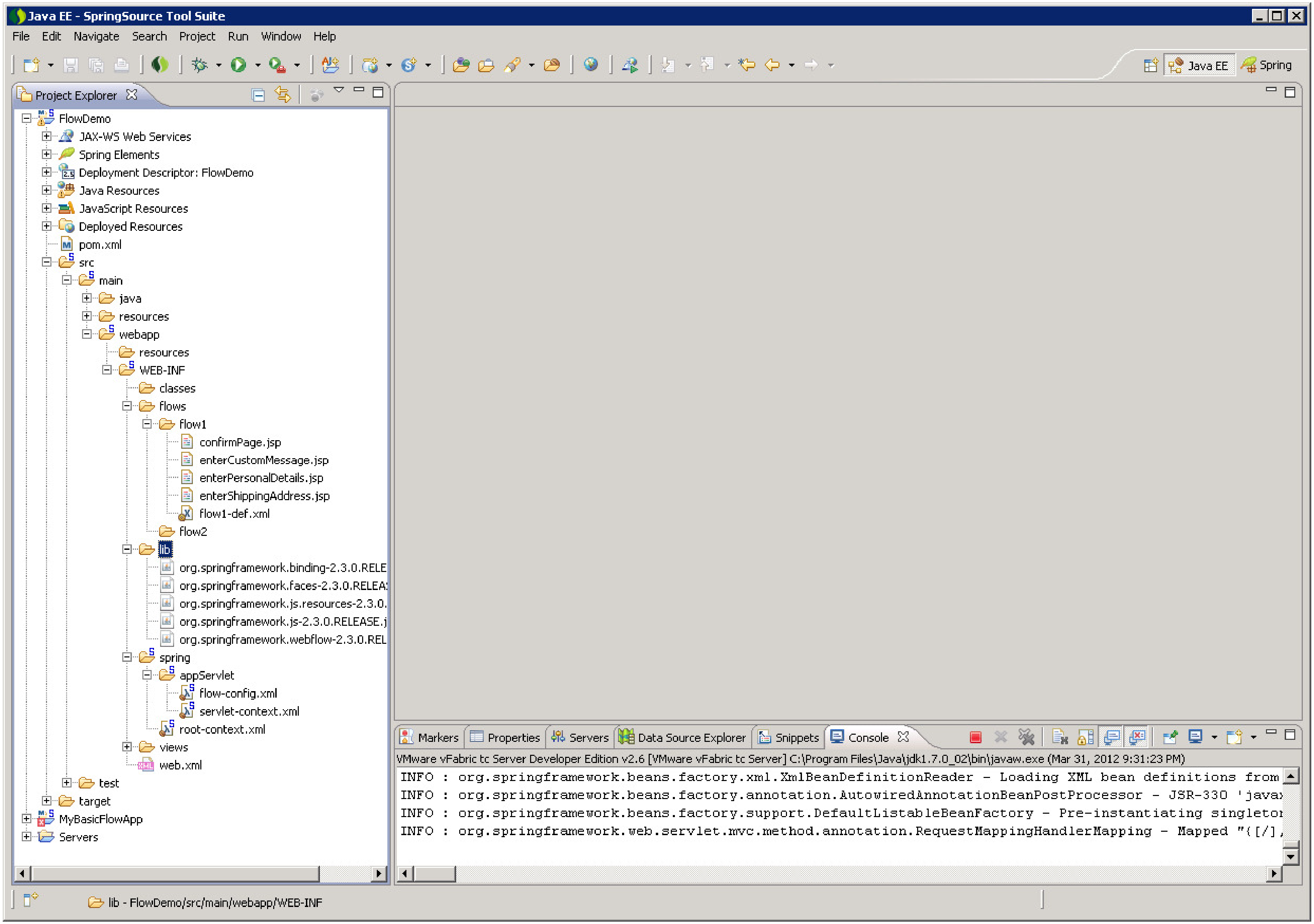
JARs and class folders on the build path:

- org.springframework.webflow-2.3.0.RELEASE.jar - C:\Users\yusuf\Desktop\spring-webflow-2.3.0.RELEASE\dist
- JRE System Library [jdk1.7.0_02]
- Maven Dependencies

```
low="http://www.springframework
2.5.xsd
ng-webflow-config-2.0.xsd">
you use.
/>
>
vlet.FlowHandlerAdapter">
of
Mapping">
<property name="flowRegistry" ref="flowRegistry" />
```

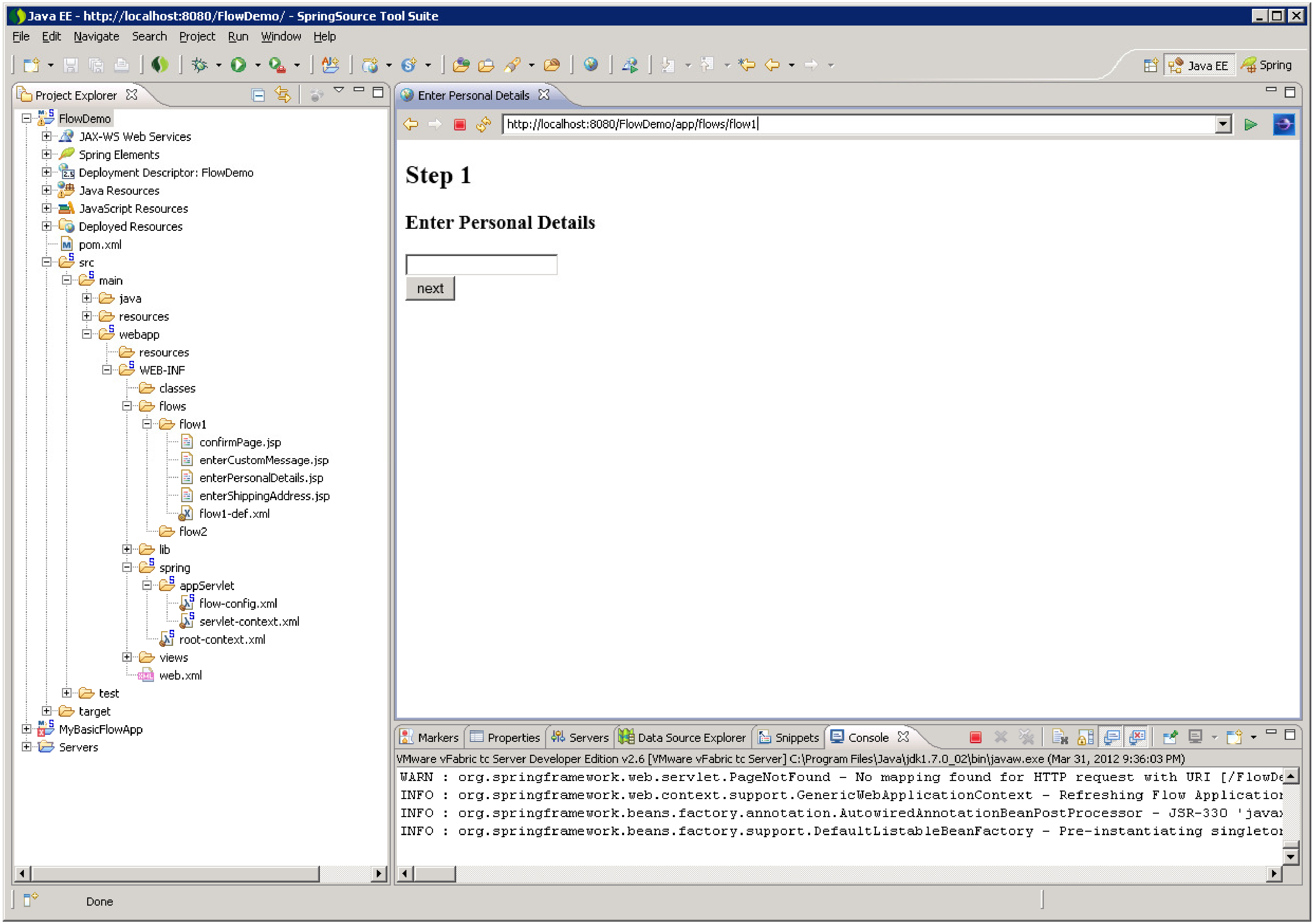
No consoles to display at this time.

Step 11. Also, add the jar files to the /WEB-INF/lib directory as they will be needed by the application server (If Maven is used, you don’t need this).



```
VMware vFabric tc Server Developer Edition v2.6 [VMware vFabric tc Server] C:\Program Files\Java\jdk1.7.0_02\bin\javaw.exe (Mar 31, 2012 9:31:23 PM)
INFO : org.springframework.beans.factory.xml.XmlBeanDefinitionReader - Loading XML bean definitions from
INFO : org.springframework.beans.factory.annotation.AutowiredAnnotationBeanPostProcessor - JSR-330 'javax
INFO : org.springframework.beans.factory.support.DefaultListableBeanFactory - Pre-instantiating singleton
INFO : org.springframework.web.servlet.mvc.method.annotation.RequestMappingHandlerMapping - Mapped "{[/],
```

Step 12. We are done. Run the application with this URL http://localhost:8080/FlowDemo/app/flows/flow1



Step 1

Enter Personal Details

next

VMware vFabric tc Server Developer Edition v2.6 [VMware vFabric tc Server] C:\Program Files\Java\jdk1.7.0_02\bin\javaw.exe (Mar 31, 2012 9:36:03 PM)

```
WARN : org.springframework.web.servlet.PageNotFound - No mapping found for HTTP request with URI [/FlowDe
INFO : org.springframework.web.context.support.GenericWebApplicationContext - Refreshing Flow Applicatio
INFO : org.springframework.beans.factory.annotation.AutowiredAnnotationBeanPostProcessor - JSR-330 'javax
INFO : org.springframework.beans.factory.support.DefaultListableBeanFactory - Pre-instantiating singleto
```